E. Phage Typing

Salmonella Typhimurium and *S.* Typhimurium variant 5- (formally variant Copenhagen) isolates with resistance to at least ampicillin, chloramphenicol, sulfisoxazole and tetracycline were submitted to NVSL for phage typing.

III. Reporting Methods

WHONET 5, a microbiology laboratory database software, was used to categorize MICs as resistant, intermediate susceptibility (when applicable), and susceptible according to CLSI established interpretive criteria (when available). The 95% confidence interval was calculated using the Wilson interval with continuity correction method. MIC distributions as well as resistance and intermediate susceptibility percentages were tabulated by pathogen and food animal source. For *Salmonella*, MIC distributions were tabulated both on macro and micro levels. At the macro level, all *Salmonella* were analyzed for MIC distributions. At the micro level, isolates were grouped by serotype prior to analysis; results were tabulated for the top 11 serotypes from chicken, cattle and swine and for the top eight serotypes from turkey. MIC distributions were tabulated separately for *C. coli* and *C. jejuni*. Additionally, historical resistance percentages by food animal source and organism are presented from 1997 through 2007 for *Salmonella*, from 1998 through 2007 for *Campylobacter*, and from 2000 through 2007 for *E. coli*.

The frequency of *S.* Typhimurium showing resistance to at least ACSSuT (ampicillin, chloramphenicol, streptomycin, sulfisoxazole and tetracycline) or ACSuT (ampicillin, chloramphenicol, sulfisoxazole and tetracycline) as well as phage type distributions are reported separately for *S.* Typhimurium and *S.* Typhimurium variant 5- isolates. The frequency and percentage of confirmed *S.* Typhimurium DT104 isolates is reported separately by food animal source from 1997 through 2007.

Previously, multiple drug resistance (MDR) was defined as resistance to two or more antimicrobials regardless of subclass. In this report, MDR is reported as resistance to more than one CLSI subclass.

MDR tabulations for all pathogens were limited to only those antimicrobials tested for all years. The 14 core antimicrobials for *Salmonella* and *E. coli* were amikacin, gentamicin, kanamycin, streptomycin, ampicillin, amoxicillin/clavulanic acid, ceftiofur, ceftriaxone, chloramphenicol, sulfonamides (sulfamthoxazole/sulfisoxazole), trimethoprim/sulfamethoxazole, ciprofloxacin, nalidixic acid, and tetracycline. The seven core antimicrobials for *Campylobacter* were gentamicin, clindamycin, azithromycin, erythromycin, ciprofloxacin, nalidixic acid and tetracycline.